## **Supporting Information**

Zhong et al. 10.1073/pnas.0802866105

Table S1. Nucleotide sequences of primers used for site-directed mutagenesis

Mutants	Primer sequences (5'-3')				
Y252F	CCCTGCCCACC <b>TTC</b> AACAACCAC <b>C<u>TG</u>TACAAACAAATTTCCAGCC Tyr→Phe BsrGI</b>				
Y272F	CCAATCAGGA <b>GC</b> TTCGAACGACAATCAC <b>TTC</b> TTTGGCTACAG BstBl Tyr→Phe				
Y444F	CGACCAGTACCTGTAT <b>TCTTA</b> AGCAGAACAACACTCCAAG Tyr→Phe AfIII				
Y500F	CAACAACAGTGAA <b>TTC</b> TCGTGG <u>ACCGGT</u> GCTACCAAGTACC Tyr→Phe Agel				
Y700F	GGAATCCCGAAATTCAG <b>TTC</b> AC <u>T<b>TC</b>GAA</u> CTACAACAAGTCTG  Tyr→Phe BstBI				
Y704F	GGAATCCCGAAATTCAGTACAC <u>T<b>TC</b>GAA</u> C <b>TTC</b> AACAAGTCTG BstBl Tyr→Phe				
Y730F	CCTCGCCCCATT <u>GGTACC</u> AGA <b>TTC</b> CTGACTCGTAATC Acc65l Tyr→Phe				

Nucleotide sequences of PCR primers used for site-directed mutagenesis of surface-exposed tyrosine residues. The codon triplets are shown in bold; red denotes that the mutations from tyrosine to phenylalanine residues, and green indicates that silent mutations to create the restriction enzyme sites shown (underlined), which were used to obtain the desired clones.

Table S2. Titers of the WT and Y-F mutant scAAV2 vectors

Packaging titers, vgs/ml

AAV vectors	First	Second	Third	Fourth
WT scAAV2-EGFP	3.4 × 10 <sup>11</sup>	1.0 × 10 <sup>12</sup>	3.2 × 10 <sup>11</sup>	3.0 × 10 <sup>11</sup>
Y252F scAAV2-EGFP	$3.8 \times 10^{11}$	$4.0  imes 10^{11}$	ND	ND
Y272F scAAV2-EGFP	$7.7 \times 10^{11}$	$1.0  imes 10^{11}$	ND	ND
Y444F scAAV2-EGFP	$9.7  imes 10^{10}$	$4.0  imes 10^{10}$	$6.0 \times 10^{9}$	$5.0  imes 10^{10}$
Y500F scAAV2-EGFP	$8.8  imes 10^{10}$	$2.0  imes 10^9$	$4.0  imes 10^{10}$	$6.0 \times 10^{10}$
Y700F scAAV2-EGFP	$1.0  imes 10^{11}$	$4.0  imes 10^{11}$	ND	ND
Y704F scAAV2-EGFP	$6.0  imes 10^{11}$	$2.0  imes 10^{11}$	ND	ND
Y730F scAAV2-EGFP	$1.2  imes 10^{11}$	$5.0  imes 10^{11}$	$1.2  imes 10^{11}$	$4.0  imes 10^{11}$

ND, not done. Physical particle titers of the WT and surface-exposed tyrosine-mutant scAAV2-EGFP vectors generated by four separate packaging runs. The first two packaging runs were performed by using one cell factory for each of the vectors, and the last two packaging runs were carried out by using five 150-mm culture dishes for each vector. Vector titers were determined on DNA slot-blots using a <sup>32</sup>P-labeled EGFP DNA as a probe.